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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,560	03/21/2000	NIGEL LAMBERT	TPP30852	6480

7590

04/04/2003

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EXAMINER

PADGETT, MARIANNE L

ART UNIT

PAPER NUMBER

1762

18

DATE MAILED: 04/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/463, 560

Applicant(s)

Lainbert et al

AS18

Examiner

M.L. Padgett

Group Art Unit

1762

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 2/27/03 (10/15/02) + 8/3/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 111; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-7 + 9-23 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-7 + 9-23 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/15/02 (resubmitted 2/27/03) has been entered.

2. Claims 1-7 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While the amendment of 8/13/02 corrected the previously rejected 112 problems for claims 2-3 and 4, the lack of clarity or uncertainty as to exactly what the composition comprises remains (page 2, rejection of Paper No. 12). On page 3 of the remarks, applicants put forth a "definition" for "functionality and "multi-functional" cited from page 8 of their specification, however that definition is for "multi-functional radiation curable element" (emphasis added), which does not correspond to the limitations of the claims, that are more general. Element is a singular quantity, while material is more generic, in that it may be made up of one or many elements, i.e. the claimed "material" could be made up of a single compound corresponding to the definition's element, or it could be made up of multiple compounds, as in a resin with 3 polymeric compounds, each having a functional group. While from applicants' discussion in their response, it appears that they intend to have at least 3 functional acrylate groups on a single compound, while

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their claims as written include this, they do NOT require it, because "material" is too generic (i.e. equally broad as composition).

To reiterate discussion of the advisory action, applicants' interpretation (page 4 of 8/13/02 response) of the claim language "at least 30% by weight..." is not commensurate in scope with the actual claim language. As written, the "coating composition" comprises an unknown amount (percentage) of "reactive part", which in turn comprises "at least 30% by weight multi-functional material...", which itself comprises an unknown percentage of material (compound, monomer, resin, or what is unspecified) that has at least 3 functional acrylate groups. While claim 1 may include  $\leq 30\%$  by wt multi-functional material, it is in NO way limited to that, since the reactive part could be any percentage by weight greater than zero of the coating composition. That one does not know (cannot determine) from the claim whether "material" is referring to a monomer, or a resin, or some mixture of compounds that contain generic functional groups or acrylate groups is as further complication. On page 4 of the response (3<sup>rd</sup> paragraph), applicant's say that "all compounds must comprise at least three functional acrylate groups", but THREE are NO COMPOUNDS claimed, just generic or nonspecific "material".

Concerning the definition of "functionality" discussed on page 4 of the response, from page 8 of the specification. The periodic table lists elements and they do not contain any functional groups, so the "element" in the "definition" must be the generic term, so could mean anything from monomer, resins, compounds and any group mixture thereof, etc., plus the claims discuss generic material not element(s). While

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"functional group" is not used in the claims, so is applicant trying to define it more narrowly than would one of ordinary skill in the art, so that it only includes "acrylate groups with c=c double bonds? If so, one would not need to list "there functional acrylate groups" separately (but the definition does not appear sufficient therefore), however "material from the claims is not necessarily synonymous with "element" from the definition, and is unlikely that anyone reading the statement concerning functional groups in context, would equate all functional material in the claims with only or necessarily referring to acrylate groups with c=c bonds. If this is actually what applicants intend, then the confusion can be removed by claiming the specific functional group, rather than generic "multi-functional material." At present, the record is unclear, and applicant would need to show support for their alleged compounds discussed on page 4.

As the above confusion of meaning, as evidenced by the different interpretations of the claimed meaning by applicant and examiner, remain in claim 1, this part of the 112 rejection is maintained.

3. It is noted that the first paragraph rejection of Paper No. 12 contained two typographical errors, first that it should have been over claims 1-23, and second, that "action" in its second to last line should have been --acetone--. However, applicants' amendment to claim 1, corrected the problem intended to be discussed therein, so the issue is mute.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moussa et al alone, or in view of Jonssen et al (US PN 5,446,073), as applied in Section 4 of Paper No. 12.

For applicants' arguments against Moussa et al to apply, they need to clarify the language of the claims (with support thereof), i.e. the independent claim, so that the meanings that applicants appear to intend, are necessitated. Since as presently written, the material that is supplying the acrylate functional groups, need not be a single compound or molecule, in the examples of 32-35 in Moussa et al, 3 molecules of reactive diluents (meth)acrylic carbonate, supply three functional groups, or alternately, the reactive diluents supply one while the "diacrylic polyurethane" supply two more. All parts of the composition are active or reactive in the deposit, so all read on both the "reactive part" and the composition, so since 50 part + 50 parts = total number parts, the percent by weight is 100%. Appropriate narrowing of the language of the claims to make the claims commensurate in scope with applicants' arguments, would remove these examples, but clear support for all changes should be shown.

It is further noted, that col. 15, lines 12-14, discuss the irradiation producing "insoluble contents", hence while what the solvents involved are not discussed, one of ordinary skill in the art would presume that typical polymeric solvents are being discussed, hence solvents such as alcohols, acetone, etc. would have been expected to

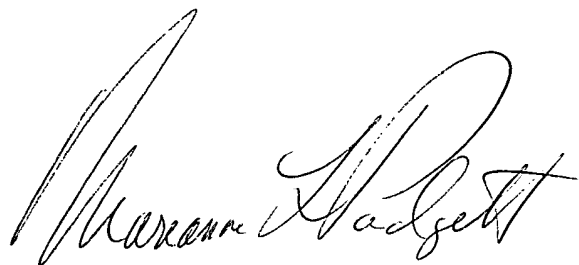
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have been intended, hence increase of the acetone solvent resistance is generically suggested.

6. Applicant's arguments filed 8/13/02 and discussed above have been fully considered but they are not persuasive.

7. Any inquiry concerning this communication from the examiner should be directed to M. L. Padgett whose telephone number is (703) 308-2336. The examiner can generally be reached on Monday-Friday from 8:30 a.m. to 4:30 p.m.; and fax phone numbers are (703) 872-9310 (regular); (703) 872-9311 (after final); and (703) 305-6078 (unofficial).

M.L. Padgett/dh 3/28/03  
April 3, 2003

A handwritten signature in cursive script, appearing to read "Marianne Padgett".

**MARIANNE PADGETT**  
**PRIMARY EXAMINER**